

**Before The
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.**

In the matter of:)	
)	(Currently filed in MM Docket
Petition for Notice of Inquiry Regarding)	99-325)
Establishment of a New Broadcast Band)	
)	RM-_____
)	___ Docket 03-_____
)	

COMMENTS OF REC NETWORKS

1. Comes now, REC Networks ("REC"), a supporter of locally owned and diverse radio. REC currently operates several Internet only radio stations. REC also operates several websites including the original LPFM Channel Search Tool¹. REC Networks has been a significant contributor in the proceedings that established a Low Power FM ("LPFM") service and currently represents the interests of independently owned Low Power FM broadcast stations and their listeners².

2. The record now has before it a Petition for Notice of Inquiry Regarding Establishment of a New Broadcast Band ("Petition") submitted by Citizen's Broadcast Band Discussion Group, John Anderson, Nickolaus E. Leggett and Don Schellhardt, Esquire (collectively "CBBDG").

REC supports this petition in part for the reasons herein.

This Petition was improperly placed in Docket 99-325

3. REC feels that the Office of the Secretary has placed the Petition in Docket 99-325 in error. Even though the a portion of the Citizen's Broadcast Band ("CBB") proposal may involve the use of digital audio broadcasting³, REC feels that the spirit of this proposal is to create a new

1 - <http://www.recnet.com/lpfm>

2 - REC has on it's own motion filed motions when it was appropriate to promote a compliant LPFM service. See Michael Krueger - Informal Objections (7 file numbers), See Centro Cristiano de Fe - Informal Objections (2 file numbers). In addition, REC's proactive action has resulted in the LPFM application for Ministerio Palabra Viva (FCC File Number BNPL-20000602AID) to be reinstated twice.

3 - Petition at 12.

broadcast band and not to create an in-band or out of band DAB solution for incumbent broadcasters, which is the scope of 99-325. REC feels that this petition should be placed in a separate proceeding as this petition is not in the scope of 99-325.

The need for more public access to the airwaves

4. REC agrees that there needs to be more public access to the broadcast airwaves. We feel that a significant step in the right direction was the creation of the LPFM service. However, subsequent lobbying by the broadcast industry using questionable data shut the door⁴ for hundreds of LPFM stations that have already applied for stations and potentially slammed the gates for thousands of others⁵. Congress had ordered an independent study of the protection of third adjacent channel on LPFM stations. That study appears to be completed⁶, however the public has not seen any results of the outcome, either negative or positive. Even worse, all of the deadlocked short-spaced applications were dismissed⁷ prior to the public announcement of the outcome of the third adjacent channel study⁸. Even if LPFM applicants were no longer required to protect the third adjacent channel, this still leaves many communities with a lack of channels. There are many organizations who wish to get their voice on the air however due to the finite broadcast spectrum, their voices will never be heard.

"The Lack of Real Estate" - If the Commission giveth, the Commission must taketh away

5. As supported by the petitioners⁹, one of the main problems with proposing any new service in the existing FM broadcast band is the "lack of real estate". Even though there are many

4 - See "Making Appropriations for the Government of District of Columbia for FY 2001" Pub L. No 106-553 114 Stat 2762 (2000).

5 - See REC's "SuperCoordinator" reports filed during the MM Docket 99-25 proceeding.

6 - See MITRE Corporation's Request for Proposal at 2.5, attached. Final report from the sub-contractor (which turned out to be Comsearch) due "no later than January 17, 2003".

7 - See Low Power FM New Station Applications Dismissed for Failure to Comply with Third-adjacent Channel Protection Requirements - Public Notice DA 03-794, March 17, 2003.

8 - See Dismissal of "Deadlocked" Applications for Original Construction Permit of the following LPFM applicants: Atlanta and Omar Mosques, et al. File number BNPL-20000608ACW and others. Petition for Reconsideration filed by REC Networks, et al, 03/24/2003.

9 - Petition at 8.

legitimate broadcasters in those 100 channels, there is also a lot of "wasted spectrum". This includes the proliferation of satellite fed translators in the reserved band as well as the translators that repeat those stations in the non-reserved band¹⁰. In the west, we have seen many proceedings to amend the Table of Allotments, especially from parties from whom we question if they are able to build all of the stations they proposed (considering they win all of those auctions). Some of those allotment proceedings usually result in very ugly counterproposals¹¹ that destroy the chances of any future for LPFM in the non-reserved band. Of course, the perceived interference from LPFM stations to TV Channel 6 as well as unnecessary satellite translators prevent many opportunities for reserved-band LPFM.

6. Radio spectrum is really like real estate. It is "zoned" for a particular use. The Table of Allotments is the "zoning map". The FCC and the International Telecommunications Union (ITU) are the "zoning board". Regardless of where you get the spectrum from, you are taking it away from another user. Like in community redevelopment cases, we must identify underused or "slum" spectrum.

Where is the "slum" spectrum?

7. In the Petition, the Petitioners make reference to some concepts but do not look at actual frequency bands¹² where either a new broadcast band or an expansion to the existing broadcast band can reside. Here are some considerations for broadcast band expansion:

82-88 MHz - TV Channel 6

REC feels that the prime spectrum for broadcast band expansion would be to remove TV Channel 6 from the core¹³ and turn the spectrum over to the aural broadcast service. As we have pointed out in other proceedings, due to the restrictions on the use of Channel 6

10 - REC feels that a local signal should have spectrum priority over a distant signal. See our comments in RM-10609.

11 - One proceeding that is currently open would result in the loss of a primary channel for LPFM in the Las Vegas area if the Commission was to ever restore the third adjacent channel restriction.

12 - We do note that the petitioner did state "L Band" as a potential target band for CBB use.

13 - With recent Congressional actions, the "core" television spectrum is now Channels 2 through 51.

for DTV¹⁴ as they relate to the protection of non-commercial educational (NCE) broadcast stations in the reserved band, Channel 6 is very undesirable for DTV use¹⁵. In the 82-88 MHz band, 30 new channels¹⁶ can be created. Even National Public Radio (NPR) has suggested that this spectrum be considered for expansion of the FM band¹⁷. If NPR's own DTV Channel 6 interference study¹⁸ was used to determine interference to FM stations operating in Channel 6 spectrum from DTV Channel 5, we would be able to operate stations in the spectrum of 84.5-87.9 in television markets with a DTV Channel 5. Even though there are no known studies of NCE-FM interference to DTV Channel 6 stations, we do not feel that there will be any significant interference to a DTV Channel 5 station from a 100 watt LPFM station operating on 84.5-87.9.

We point out also that receivers are readily available for this band as the broadcast band in Japan is 76-92 MHz¹⁹. REC feels that the existing LPFM interference rules can be applied to the 82-88 MHz spectrum modified to show limited operation on the channels 82.1 through 84.3 in Channel 5 markets and to protect incumbent NTSC Channel 6 stations until after the transition is complete as well as foreign Channel 6 allotments.

14 - See §73.623(f).

15 - We point out in an Table of Allotments proceeding that just opened, the petitioner wishes to substitute a VHF high band channel for DTV Channel 6. If this is granted, the only DTV Channel 6 that is on the Table of Allotments will be in Weston, WV. We also note that the Weston station's NTSC channel is 5 meaning that it is very likely that the station can easily return to Channel 5 after the conclusion of the DTV transition of Channel 6 is removed from the core.

16 - See Appendix A.

17 - See *Reexamination of the Comparative Standard for Noncommercial Educational Applicants*, MM Docket 95-31, Second Report and Order at 42. Commission dismissed NPR's request to reallocate Channel 6 (82-88 MHz) to the FM broadcast service because it was "out of the scope" of that proceeding. REC feels that an allocation for FM broadcasting at 82-88 MHz is in-scope for this proceeding.

18 - See *DTV Channel 6 Interference to NCE-FM Reception. Final Report*. Published © National Public Radio <http://iris.npr.org/euonline/dtvch6>.

19 - REC does not feel that it is appropriate to recommend expansion of the FM band to 76 MHz at this time due to the significant number of DTV stations that are allotted Channel 5 (vs. Channel 6). If we prohibit all FM stations from operating in the lower Channel 6 spectrum in DTV Channel 5 markets, this should alleviate any concerns about interference to either the DTV station or the FM stations.

REC feels that the public interest benefits of the potential for thousands of new voices in hundreds of communities far exceed the benefits of a single full power DTV station in West Virginia²⁰.

The time is now to "condemn" the Channel 6 spectrum²¹, remove it from the Core and redevelop it with LPFM, displaced Class-D and other lower power²² NCE-FM stations.

26.1 - 26.5 MHz - Narrowband Community Speech Radio Service (NCSRS)

Another portion of spectrum being considered by REC for potential community broadcast use is spectrum currently used for Broadcast Auxiliary Service (BAS) use²³. This spectrum would allow for 20 FM channels of 20 kHz bandwidth. In the alternate, 39 AM channels of 10 kHz bandwidth can be made²⁴.

REC feels that this spectrum would meet the needs of the special interest broadcasters that would benefit from this petition²⁵.

20 - We also note that there are two full power NTSC stations allocated in rural Nevada and Utah licensed to Channel 6. Since these stations were licensed after the DTV transition started, they did not receive a transition channel. They are expected to transition on their assigned channel. We do however note, that about a dozen Channel 6 NTSC stations were given transition channels outside the core. We feel these stations will eventually transition to another UHF channel in the core.

21 - See Appendix C.

22 - REC feels that NCE stations operating 0.1kW at 100m HAAT should be considered in this spectrum. We feel that comments should be solicited about permitting translators as well as if distant translators (where the primary station is in a different state and is over 400km from the translator) should be allowed in the expanded spectrum.

23 - From our suggestion to use the 26 MHz BAS spectrum, we have specifically excluded the spectrum from 25.85-26.10 MHz spectrum as that band is allocated to International Broadcast Stations.

24 - See Appendix B.

25 - REC points out that FreePage, Inc. has been granted a developmental license to provide "limited program distribution service" in the New York City area using commercial wireless frequencies and higher power transmitters. This may be a good test case (but should not be the sole test case) for the consumer acceptance and success of NCSRS/CBB-like services. See WT Docket 01-108, (FCC 02-229) Report and Order at 69.

REC feels that despite the propagation characteristics of this spectrum, low power operations will still be possible in this spectrum²⁶, especially at night when for many broadcasters would be the more desirable time to broadcast.

In this band, we feel that AM should be considered as it is detectible by many shortwave²⁷ receivers currently on the market thereby reducing any perceived consumer hardship.

Other bands to consider for broadcasting

- **Portion of the 29.7-50 MHz band.** One consideration that can be made is to look at the "VHF-Lo" spectrum for possible consideration for a Citizen's Broadcast Band. Frequencies in this abandoned by public safety, land mobile and possibly CMRS can be refarmed for limited use by the NCSRS/CBB. Frequencies may still experience the propagation characteristics as the proposed 26 MHz band but at the higher frequencies, it is less likely.
- **470-512 MHz.** REC feels that lower power NCSRS stations can operate in a 25 KHz channel in the 470-512 MHz band as long as full protections are afforded to TV & DTV broadcast stations and non-broadcast services such as land mobile, public safety and Gulf Coast operations.

Bands suggested by the petitioner

Out of all of the concepts suggested by the petitioner, the grant of a portion of the L-band may be used. The only problem that will be faced with this band is the public acceptance of such a service with the lack of equipment currently available²⁸. For L-band to be successful as a Citizen's Broadcast Band, a major investment would have to be made by

26 - The propagation characteristics that may cause distant NCSRS stations to interfere with a local daytime NCSRS station is a phenomenon that occurs in 14-year cycles.

27 - The proposed spectrum is adjacent to the 11 meter international shortwave broadcast band.

28 - We note that the petitioner has stated that a CBB allocation should be given to that portion of the L-Band that is not used for Eureka 147 digital broadcasting.

the manufacturers²⁹. Since this spectrum in this mode will only be used in the United States, many manufacturers may be unlikely to manufacture equipment due to a potentially low rate of return.

Based on it's potential for consumer acceptance, manufacturers acceptance and compatability with neighboring services, REC feels that the first choice for an expanded broadcast band should be to extend the existing band into the Channel 6 spectrum with restrictions in Channel 5 markets and power limits of 100W ERP at 100M HAAT (to allow LPFMs³⁰ and the lowest powered NCE-FM Class A stations to operate).

Speaking about service areas in size, not watts

8. When speaking of how much "power" a station can operate, 250 watts at 88 MHz may be one thing but 250 watts at some of the bands the petitioner is proposing can fry a hot dog and unless the transmitter site is at the highest site in the city, is pretty much useless, especially on rainy days.

9. We hear about the LP-10 service has 10 watts and the LP-100 service having 100 watts. Of course that's 100 watts at 30m HAAT. In fact, many LP-100 stations operate nowhere near 100 watts! We need to look at primary service areas. For the LPFM service, those are 5.6 km for LP-100 and 3.2 km for LP-10.

10. If a new radio broadcast service is proposed in spectrum outside the 76-108 MHz band, then new power levels would need to be determined, which would then leave the question, what size service area would suffice? The petitioner feels that the new service should not be "tiered" like the LPFM service is and we agree that a service outside of the 76-108 MHz spectrum should be a

29 - We note the number of amateur radio transceivers that operate in the 222-225 MHz spectrum, a band used primarily used in the United States and Canada vs. amateur transceivers that operates in the 144-146 MHz band, nearly a worldwide allocation.

30 - LPFM would continue to be subject to 100W at 30m HAAT. It may also be desirable to restrict six channels from 86.9 through 87.9 MHz to LP-10 stations (10W at 30m HAAT) as this will allow room for the lowest power LPFM stations, even in urban areas with a Channel 201 and 202 and would reduce interference potential to full power FM stations on Channels 201, 202 and 203.

"non-tiered" service but we would like to see a determination from stakeholders of how large of a primary service area (in kilometers) should a CBB station be afforded.

11. On the subject of increasing the power of LPFM stations³¹ (to 250W at 30m HAAT for example), we do not feel the time is right yet. Let's get the LPFM stations that are waiting on the air first before we look at any expansion³².

Eligibility for licenses

12. The petitioner wants to license CBB stations to small community groups and individuals. We agree that small community groups should be considered for the new broadcast service. However, we do not feel that an individual licensee qualifies as "non-commercial educational" as defined in 47 USC 397(6). Since an individual is not considered by law as "non-commercial educational", then licenses are subject to competitive bidding under 47 USC 309(j).

13. REC feels that the existing NCE qualifications should apply to any new service, however we agree there should be no special consideration to "established organizations" when considering mutually exclusive applications in the new service.

Other proposed rules

14. REC will reserve comments on other operating aspects of this new proposed broadcast band until after a Notice of Inquiry is released.

31 - Petition at 15.

32 - If an LP-100 station is ever allowed to operate 250 watts, the 60 dBu (50,50) primary service area would increase from 5.6km to 7.0km.

Conclusion

15. REC feels that there is a need for additional community based broadcasting services, whether that spectrum is adjacent to an existing broadcast band (such as 82-88 MHz), in it's own band using conventional means (such as 26 MHz) or an emerging technology (as suggested by the petitioner). The previous public outcry to get on the air created the LPFM service, the corporate broadcast industry hobbled the service and most of the public whom the LPFM service was intended to serve are still crying.

16. REC feels that the Commission should first move the *Petition* out of MM Docket 99-325 as this is NOT the appropriate place for it then the Commission should release a Notice of Inquiry to look at one or more options to look at:

- Expanding the existing FM band to 82 MHz and limit the expanded band to LPFM stations and lower power NCE-FM stations.
- Consider a Narrowband Community Speech Radio Service at 26 MHz.
- Consider an NCSRS service in alternate spectrum.
- Consider one of the bands/technologies in the *Petition*.

17. REC feels that the public interest benefits of giving more citizens access to a portion of the public airwaves far exceeds underutilization of spectrum by the incumbent broadcasters, especially in light of emerging technologies.

Respectfully submitted,

/S/

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APPENDIX "A"
PROPOSED NEW FM BROADCAST CHANNELS
IF THE FM BAND IS EXPANDED INTO TV CHANNEL 6 SPECTRUM

Chan.	Freq	Notes
171	82.1	(a)
172	82.3	(a)
173	82.5	(a)
174	82.7	(a)
175	82.9	(a)
176	83.1	(a)
177	83.3	(a)
178	83.5	(a)
179	83.7	(a)
180	83.9	(a)
181	84.1	(a)
182	84.3	(a)
183	84.5	
184	84.7	
185	84.9	
186	85.1	
187	85.3	
188	85.5	
189	85.7	
190	85.9	
191	86.1	
192	86.3	
193	86.5	
194	86.7	
195	86.9	(b)
196	87.1	(b)
197	87.3	(b)
198	87.5	(b)
199	87.7	(b)
200	87.9	(b)

(a) - Restricted availability in DTV Channel 5 markets.

(b) - Operation limited to 0.01kW at 30m HAAT (LP-10)

APPENDIX B
NCSRS FREQUENCIES IN THE 26 MHZ BAND

If AM - kHz	If FM - MHz
26110	26.11
26120	
26130	26.13
26140	
26150	26.15
26160	
26170	26.17
26180	
26190	26.19
26200	
26210	26.21
26220	
26230	26.23
26240	
26250	26.25
26260	
26270	26.27
26280	
26290	26.29
26300	
26310	26.31
26320	
26330	26.33
26340	
26350	26.35
26360	
26370	26.37
26380	
26390	26.39
26400	
26410	26.41
26420	
26430	26.43
26440	
26450	26.45
26460	
26470	26.47
26480	
26490	26.49

NOTE: In the NCSRS proposal, REC proposes to sunset the BAS allocation on the above mentioned frequencies. Incumbent full power licensed users will be protected up to 100km from their broadcast antenna location.

Low Power BAS users (not LPFM) are afforded no protections.

For more information and a channel search, visit:

<http://www.recnet.com/cbb/>

APPENDIX C
TV BROADCAST STATIONS MOST LIKELY TO OPERATE ON CHANNEL 6
AFTER THE DTV TRANSITION

Facility	Call	City of License	NTSC Ch.	DTV Ch.	Comments
18066	KTVM	Butte, MT	6	2	Ch. 6 DTV assigned in Low-Band
66414	KBSD	Ensign, KS	6	5	Ch. 6 DTV assigned in Low-Band
86538	KBNY	Ely, NV	6	6	Single Channel post-1997 assignment.
83729	KBCJ	Vernal UT	6	6	Single Channel post-1997 assignment.
8651	KTOO	Juneau, AK	3	6**	Licensee does not want Low-Band
70592	WDTV	Weston, WV	5	6	May go back to Ch. 5 after transition
35855	KVIE	Sacramento	6	53	Ch. 6 DTV assigned out of core
48666	WECT	Wilmington, NC	6	54	Ch. 6 DTV assigned out of core
43203	WABG	Greenwood, MS	6	54	Ch. 6 DTV assigned out of core
35434	KOTV	Tulsa, OK	6	55	Ch. 6 DTV assigned out of core
53859	WIPR	San Juan, PR	6	55	Ch. 6 DTV assigned out of core
6885	KWQC	Davenport, IA	6	56	Ch. 6 DTV assigned out of core
53313	KSRE	Minot, ND	6	57	Ch. 6 DTV assigned out of core
9917	WCML	Alpena, MI	6	57	Ch. 6 DTV assigned out of core
71293	WKMG	Orlando, FL	6	58	Ch. 6 DTV assigned out of core
22129	WDAY	Fargo, ND	6	59	Ch. 6 DTV assigned out of core
74420	WLNS	Lansing, MI	6	59	Ch. 6 DTV assigned out of core
8616	WPVI	Philadelphia, PA	6	64	Ch. 6 DTV assigned out of core

NOTE: One of the original DTV Channel 6 allotments was placed in New Haven CT for WCTX on NTSC Channel 59. That allotment was changed to Channel 39.

** - The licensee of KTOO has filed a Petition to amend the DTV Table of Allotments to substitute DTV Channel 10 for Channel 6 claiming they do not want to be the only low-band DTV in Juneau.